THE GERIATRIC MEDICAL EDUCATION IMPERATIVE*

T. Franklin Williams, M.D.

National Institute of Health Bethesda, Maryland

In my view, the single most important and urgent need facing our nation today in the field of aging and geriatrics is the education of professionals. There is no need to dwell on the overall geriatric imperative: we are well aware of the rapidly increasing number of old and very old members of our population. In the professional lifetime of most people at this meeting, i.e., by 2020, there will be a doubling of the numbers of people age 65 and over, and in the next 15 years there will be a doubling of those who are age 85 and over. We need to be prepared to address these numbers.

As Dr. Elster has already indicated, most of the practice of many physicians already is among older people; this will continue to become more and more true. Thus, it is fair to say that virtually every practitioner of medicine, in all specialities, will be dealing predominantly with older people, with the exception of pediatrics and obstetrics. This is a medical education imperative that applies to the entire profession and not just to any single smaller group.

Further, we need to keep in mind that this imperative has some portentous implications for our society: the quite realistic projections are that we will have half again as many people in nursing homes by the turn of the century, 15 years away, and will need 30 to 50% more acute hospital beds just to meet the acute needs of older people unless we can improve both our basic knowledge and its applications to minimizing the problems that occur in old people and improve our ways of providing care in other than institutional settings. Our goals should be to prepare the research foundations, and to move on to solving the problems of older age, and to improve our care systems that will minimize the need for such institutional settings, both acute and chronic.

To meet this challenge we need to face up to what should be done about

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educating all professionals. Medicine is our topic today, but the need applies to all professionals in the health and social services field.

Congress, recognizing this need in its appropriations laws for fiscal 1984, directed the Public Health Service of the Department of Health and Human Services to conduct a study and report back to Congress on how the teaching of geriatrics and gerontology in this country can be enhanced. Their charge reads in part: (1) The Committee [on Appropriations] is deeply concerned about the lack of an effective coordinated approach in the Department to improve training programs and activities in geriatrics and gerontology. The Committee strongly believes the Department must act to correct this deficiency so that treatment and service to older Americans can be strengthened. For example, a critical need exists for gerontologic physicians who are skilled in the diseases common among the elderly. Such training can help to reduce the current 10 to 30% misdiagnosis rate for seniletype patients. The Committee directs the Department to develop a clear plan of action to improve training in geriatrics and gerontology in fiscal 1984 and in the next several years under activity supported through the Health Resources and Services Administration, National Institute on Aging, Administration on Aging and National Institute of Mental Health.

This charge was given to me as the new director of the National Institute on Aging to prepare a response, with the participation of the other relevant agencies of the Department.

We established a task force representing all federal agencies directly involved in both curriculum development and career development related to geriatrics and gerontology. The task force collected available information, invited the help of a number of experts, and developed a *Report on Education and Training in Geriatrics and Gerontology* which was submitted to Congress in February 1984. The presentation today draws considerably on this report which, in my judgment, is a sound and ambitious but justifiable position on the directions in which the federal government needs to go to try to help meet this challenge.

The report begins by stating a number of overall guiding principles on which there was full consensus. The first and most important of these is that all students preparing for careers in the health and other human service professions should have education about the aging process and the strengths and problems of the aging.

Other principles stated that health professional schools should have faculty members with expertise in aging to conduct substantial and high quality basic graduate and continuing education programs and to serve as role models; and that faculty members should have opportunities to engage in research on aging and the aged to maintain their expertise and to expand the available body of knowledge. In addition, educational programs should include both didactic and clinical experience and involve work with both well and ill elderly, and information on aging should be integrated throughout the curriculum, wherever possible. Aging is clearly not a topic that can be addressed by one department or by a few people, but must permeate the entire medical education system.

Further, education and training programs should be of adequate duration to develop the knowledge and skills required for high quality performance. The duration may be from relatively short periods for continuing education activities to three years or more for people developing research careers. In other words, we need a variety of efforts tailored to the whole range of health professionals. It is laudable that the program today includes a section on the issue of continuing medical education.

Another principle is that interdisciplinary experiences should be a regular and integral part of training programs in geriatrics and gerontology in light of the complex needs of many elderly people. Today's conference addresses this issue through the inclusion of both basic and advanced education in the psychosocial and functional aspects as well as the biomedical aspects that are all important parts of geriatric education. The integration of these in an interdisciplinary way, in my judgment, is an absolute essential for medical education in geriatrics.

The final principle that I shall quote from our report is that academic programs should be linked on a continuing basis with community programs, including hospital long-term care and ambulatory services, to ensure interchange of ideas and experiences. The whole spectrum of care settings and care approaches for older people must be a part of the educational program for all physicians who are going to be dealing with older people.

Against the background of these principles, the report proceeds to consider the necessary staffing for education in the fields of geriatrics and gerontology, i.e., what types and numbers of faculty are needed.

There are limited objective data on this point, but some of the most valuable in relation to geriatric medical education came from the study conducted by Dr. John Beck and associates through the Rand Corporation. We also drew on the Institute of Medicine report and study chaired by Dr. Paul Beeson, who is also participating here today, and on the work of the Association of American Medical Colleges whose recommendations will be presented here by Dr. Joseph Johnston.

Based on this information and other limited studies that have been done. we arrived at a judgment about what is needed to staff the medical schools of our country to provide the necessary faculty members for sound education in geriatrics and gerontology for all medical students and house staff and in continuing education. Our judgment is that we need a minimal critical mass of faculty members in every medical school—and also in every other health and human service professional school, but we are not dealing with those in this symposium. In medical schools and related teaching hospitals, where medical students and house staffs are taught, the critical mass of physician faculty members may be achieved with a minumum of nine or 10 faculty members fully committed to this effort. These figures would include geropsychiatry as well as other fields. There should also be approximately an equal number of basic scientists as teachers and investigators committed to the field. Over all, these amount to a goal of approximately 1,300 physician faculty members in clinical departments and 1,300 other faculty members in the basic science departments to serve all of our medical schools.

We found similar evidence for needs, and arrived at analogous judgments about the other health and human services professional schools.

With such figures as goals, our task force went on to try to determine where we stand today in our country. We approached this in a number of ways, again drawing on the work of the Rand Corporation and other studies. These various studies added up to the fact that we have no more than 200 to 300 medical school faculty members in our nation at present primarily involved in teaching aging, geriatric research, and teaching. Most medical schools—about 91% according to the latest surveys—do now have some teaching in these fields, but often it is only an elective, and the average amount of faculty time committed to the field is about 2.5 full-time equivalents, with very little hard information available on the make up of these equivalent positions. Most likely, many of them are put together by bits and pieces of various faculty members, with very minimal amount of overall full-time leadership.

Since we prepared our report, a doctoral student at the University of Michigan, Clara Macklin, completed her thesis work in which she sent questionnaires to a stratified random sample of all the members of the American Geriatrics Society and the Clinical Medicine Section of the Gerontological Society of America. Her results, based on a better than 50% return of questionnaires, were very close to our committee findings: she could not identify more than 250 to 300 faculty members in our nation's medical schools who have a primary, essentially full-time commitment to this field.

These figures represent, perhaps, 10 to 15% of what we judge is our current need. The same is true, incidentally, in all the other professions, as one might expect. The next question asked was: What is our present rate of productivity of faculty for staffing our medical schools?

We reviewed all the federal programs, as well as the data developed by surveys such as those by Tarlov and colleagues and those done by the Boston University Gerontology Center and the Veterans Administration. To summarize the results, we found that at present slightly more than 100 fellows per year are being trained for faculty positions in geriatric medicine and geropsychiatry in the country. This includes support annually for approximately 70 trainees or fellows through the National Institute on Aging training programs (extramural and intramural), plus those supported by the Veterans Administration, the National Institute of Mental Health, and the Administration on Aging and a small number supported through private foundations. We also found that about 70% of those who undertake geriatric fellowship programs remain in geriatric medicine with an academic role, a high percentage compared to most training programs in other areas of medical specialty.

In our report we set as goals, first, to reach half the recommended total numbers of faculty members needed by the year 1990, and, second, to reach the full number by the year 2000. These are very modest goals considering the need. But to reach these goals, our productivity, our output of trained faculty members would have to more than double from where we are right now. We estimated we would need to reach at least 300 new people entering the pathway for faculty careers in geriatric medicine per year, allowing for ultimate retirement of some and dropouts, to reach the goals that we have set for 1990 and 2000.

Congressional interest in this report has been strong, as evidenced by increased funds provided by the Appropriations Committee for training programs and career development programs in fiscal 1985, at NIA and NIMH, as well as increased funds for geriatric curriculum development through the Health Resources and Services Administration. Also, Senator John Heinz, chairman of the Senate Select Committee on Aging, introduced a bill to authorize specific increases in the size of training programs. Given this picture of the need and the very limited ways we are currently meeting it, what can we do to try to move more rapidly? How can we more effectively expand and reach these goals of the necessary faculty? Our report contains several suggestions which are coming to fruition. In addition to continuing present training program efforts of a variety of types, typical of the agen-

cies I have already mentioned, we are initiating several new efforts growing out of this report. One, perhaps the most important, is to use the route of "piggybacking" the training of persons interested in careers in aging and geriatrics onto existing good research and faculty training programs in other fields in order to provide such trainees with the research skills from these related fields to apply to the field of geriatrics.

We have issued a program announcement calling for applications for complementary training programs, complementary, that is, to existing training programs, by training program leaders who agree to take on trainees interested in the field of geriatrics, and provide them with this training in overall academic settings where the trainee will have continuing experience in the aging field itself, with other elements of a university medical center. We are also arranging to pay for approved but unfilled trainee positions in existing training programs. We can do that very quickly.

A second line of approach is to support midcareer changes into the field of aging and geriatrics by faculty members who are already reasonably well established, able, and interested in changing their directions into this field. Several foundations are supporting such efforts. The National Institute of Aging is also supporting this type of effort through its senior fellowship program. We encourage interested faculty members, certainly, to consider this.

A third emphasis we want to give is to expand our support for students in summertime research experiences related to aging, to interest students and acquaint them with the field earlier on. This mechanism has existed all along, and we are eager to expand it and see this accomplished in many more settings.

Fourth, we are offering the support for what we are calling faculty leaders, a faculty leadership program in geriatrics, for faculty who would be well established and ready to take a leading role in a medical center to stimulate research and training throughout the medical center and to help guide institutions into this field. We have issued a recent program announcement on this subject. Such an approach was effective in the early days of development of research and training in cancer and heart diseases. We believe this is a direction we can also use for reasonably well-placed senior people.

Other relevant agencies of the federal government, the Health Resources and Services Administration, the National Institute of Mental Health, the Administration of Aging, and the Veterans Administration, are also expanding their efforts to support curriculum development and career development in aging.

Let me summarize by saying that in my view we must prepare all health professionals for the care of older people and simultaneously advance research in aging and geriatrics. To do this successfully we need critical masses of faculty members devoted to this in every health professional school, in both basic and clinical sciences. We need excellent training programs to produce the faculty; we need overall leaders to focus and stimulate the efforts in the schools and to inform and advise public policy and operate major programs.

When we can accomplish these steps, we should have national resources which will lead to the extent and quality of services in geriatrics for older people in general that we can all be proud of.